

Work Order ID 128587

January-19-15 2:03:21 PM

128587

Page 1

Item ID: D5101-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crossbolt Spacer Assembly
 Start Date: 1/19/15 Start Qty: 60.00 ***60*** Cust Item ID:
 Required Date: 1/30/15 Req'd Qty: 60.00 ***60*** Customer:
 Reference:

Approvals: Process Plan: W Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D5101	A								
100	BAND SAW	0.00							DAS 08 9-89
100									
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	Cut blank 2.400" long								
110	HAAS CNC VERTICAL MACHINING #1	0.00							DAS 08 9-89
110									
HAAS 5AXIS	Memo	0.00							
HAAS CNC vertical machine #5	1- Mill as per Folio FB353 DWG Rev: <u>A</u> FOLIO REV: <u>AE</u>								
	2-Deburr per dwg								

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Item ID: D5101-041 Accept ***N900040100*** Setup Start ***NS1***
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 Item Name: Crossbolt Spacer Assembly
 Start Date: 1/19/15 Start Qty: 60.00 ***60*** Cust Item ID:
 Required Date: 1/30/15 Req'd Qty: 60.00 ***60*** Customer:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC2- Inspect parts off machine FAI/FAIB	0.00							DAS 08 9-89
120									
QC	Memo	0.00		15/01/24		60	✓		
Quality Control									
130	QC8- Inspect parts - second check	0.00							
130									
QC	Memo	0.00				60	✓		15-01-26
Quality Control									
140	Small Fab	0.00							
140									
Small Fab	Memo	0.00				60X	DAS 28 9-89		JAN 28 2015
Small Fab	INSTALL HELICOIL AS PER DWG .								

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Reference:

Stop *NR2*

FEB 04 2015

66

FEB 04 2015

DAS
06
9-30

MLS 1502-05

MF
15-2-4

Picklist Print

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Work Order ID: 128587

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Parent Item: D5101-041

D5101-041

Parent Item Name: Crossbolt Spacer Assembly

Start Date: 1/19/15

Required Date: 1/30/15

Start Qty: 60.00

Required Qty: 60.00

Comments: IPP REV:A NEW ISSUE 14-12-18 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDEL RINB1.000X04.0 00		Purchased	No				f	24.0000		13			

MDFI RINB1 000X04 000

Delrin Bar

L.A. 15/01/24

				<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
				MAT011	24	
				→ m131210	24	
MS21209F7-15		Purchased	No		Each	200.0000

12.750^{ft}

240

**DAS
28
9-89**

JAN 28 2015

MS21209F7-15

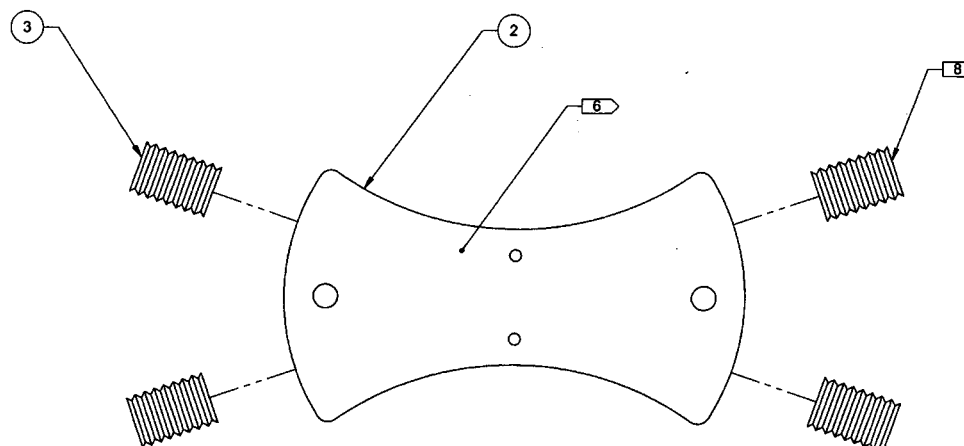
Heli-Coil, Locking

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
299	200	
m131170	200	

129x ~~20x~~ m131340 X 91

20x131410

ITEM	QTY	P/N	DESCRIPTION
1	X	D5101-041	CROSSBOLT SPACER ASSEMBLY
2	1	D5101-1	CROSSBOLT SPACER
3	4	MS21209F7-15	HELICOIL, LOCKING



W/O
128587

D5101-041 CROSSBOLT SPACER ASSEMBLY

RELEASED

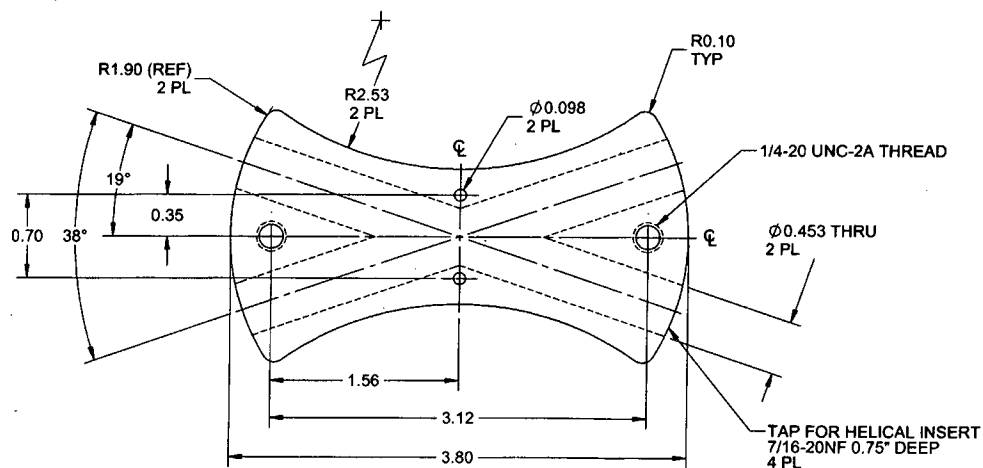
2014 NOV 24 07
EUN 14-628

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.6
 - 7) WEIGHT: 0.15 lbs
 - 8) INSTALL MS21209F7-15 HELICOIL FLUSH WITH ARC SURFACE

A		NEW ISSUE		AK	14.08.07
REV.	DESCRIPTION			BY	DATE
DESIGN	DC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. A SHEET 1 OF 4	
DRAWN	AK				
CHECKED	VS	DRAWING NO.		TITLE	
MFG. APPR.	JLM	D5101		CROSSBOLT SPACER	
APPROVED	HS	DATE		SCALE	
DE APPR.	DS	14.08.07		NTS	

APPROVED

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D5101-1 CROSSBOLT SPACER

RELEASED

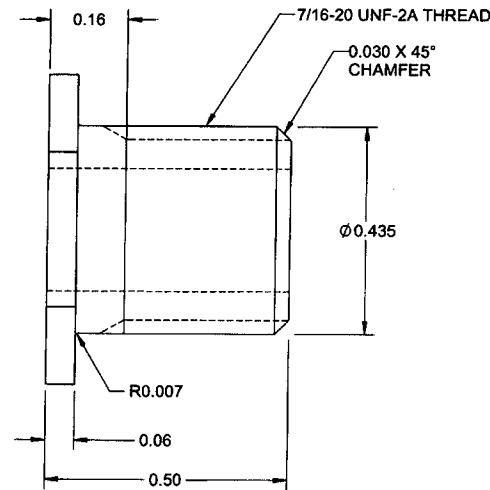
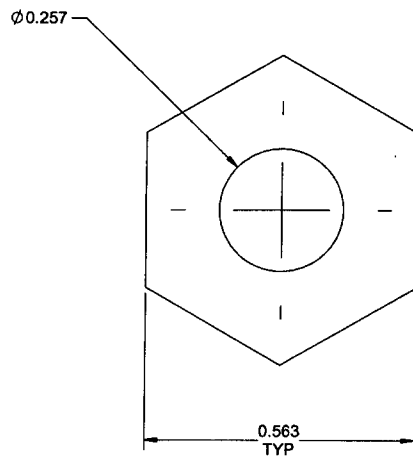
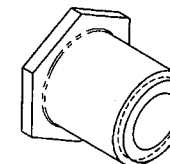
2014 NOV 24 *dp*

NOTES:

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL
REF DART SPEC M-DELRIN-B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.12 lbs

APPROVED

DESIGN	DC	DART AEROSPACE LTD	
DRAWN	AK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	VS	DRAWING NO.	REV. A
MFG. APPR.	JLM	D5101	SHEET 2 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CROSSBOLT SPACER	NTS
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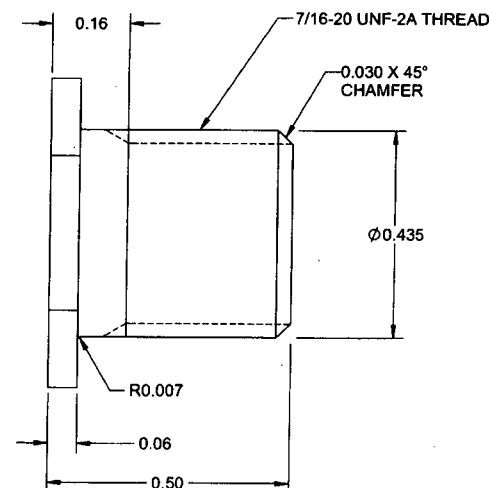
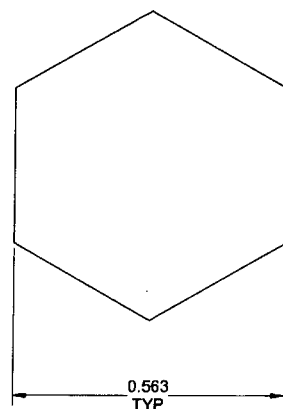
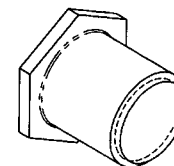
D5101-3 INSERT

RELEASED

2014 NOV 24 97

- NOTES:**
- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6R
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 0.005 lbs

APPROVED	DESIGN	DC	DART AEROSPACE LTD	
	DRAWN	AK	HAWKESBURY, ONTARIO, CANADA	
	CHECKED	VS	DRAWING NO.	REV. A
	MFG. APPR.	JLM	D5101	SHEET 3 OF 4
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	CROSSBOLT SPACER	NTS
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D5101-5 INSERT

RELEASED

2014 NOV 24

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6R
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.008 lbs

APPROVED

DESIGN	DC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	VS	DRAWING NO.	REV. A
MFG. APPR.	JLM	D5101	SHEET 4 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CROSSBOLT SPACER	NTS
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DART AEROSPACE LTD		Work Order: 128587
Description: Crossbolt Spacer Assembly		Part Number: D5101-1
Inspection Dwg: D5101	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R0.10	+/- .030	R0.100	✓		R-6	ref.
φ 0.098	+0.004 / - .001	φ 0.098	✓		Vern	GA-13
R2.53	+/- .030	R2.53	✓		R-6	ref.
0.35	+/- .030	0.350	✓		H-6	31006
19°	+/- 1/2°	19°	✓		Angle M.	CNC-17
38°	+/- 1/2°	38°	✓		"	"
0.70	+/- .030	0.700	✓		Vern	GA-13
1.56	+/- .030	1.560	✓		H-6	31006
3.12	+/- .030	3.120	✓		Vern	GA-13
3.80	+/- .030	3.797	✓		"	"
7/16-20 NF	—	7/16-20 NF	✓		ref.	—
1/4-20 UNX2A	—	1/4-20 UNX2A	✓		ref.	—
φ 0.453	/ - .001	φ 0.453	✓		Vern	GA-13
0.63	+/- .030	0.627	✓		"	"

Measured by: J.A.	DAS	Audited by: [Signature]	Preliminary Approval:
Date: 15/01/24	08 9-89	Date: 15-01-26	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15